UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,200	04/24/2007	Olaf Seupel	348162-982850	1164

94518 7590 07/21/2011

DLA PIPER LLP (US)
2000 UNIVERSITY AVENUE
EAST PALO ALTO, CA 94303

EXAMINER	
ANYIKIRE, CHIKAODILI E	

ART UNIT	PAPER NUMBER
2482	

MAIL DATE	DELIVERY MODE
07/21/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/585,200	SEUPEL, OLAF	
	Examiner	Art Unit	
	CHIKAODILI ANYIKIRE	2482	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2011*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 April 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. Acknowledgement is made of applicant's information disclosure statement.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-8 rejected under 35 U.S.C. 103(a) as being unpatentable over (US 2004/0257476, hereafter Song) in view of Suzuki et al (US 2002/0101924, hereafter Suzuki).

As per **claim 1**, Song discloses an arrangement for generating a pull-down switch-off signal for a video compression encoder, which signal is determined by the arrangement in dependence on a converted signal which is produced from an NTSC signal by means of an inverse 3:2 pull-down conversion, wherein the circuit arrangement includes a Mean Absolute Distortion detector and a circuit for determining Hadamard coefficients, wherein the MAD detector produces a MAD signal which indicates for each block of predefined size the difference between the picture contents of two consecutive frames, wherein the circuit for determining the Hadamard coefficients delivers two coefficients in blocks per frame, from which coefficients a first coefficient indicates the sum of the differences of the pixels of adjacent scanning lines i and i+1 and a second coefficient indicates the sum of the differences of the pixels of scanning lines i and i+2, and wherein the pull-down switch-off signal is generated in dependence on the values of the MAD signal summed for all the blocks of a frame and in dependence on the two Hadamard coefficients summed for all the blocks of a frame (paragraphs [0022]-[0023] and [0025]; Song discloses using SAD which is commonly used in the art similar to MAD values and the Song further discloses the detection of Hadamard coefficients).

However, Song does not explicitly teach a converted signal which is produced from an NTSC signal by means of an inverse 3:2 pull-down conversion.

In the same field of endeavor, Suzuki teaches a converted signal which is produced from an NTSC signal by means of an inverse 3:2 pull-down conversion (paragraph [0050]-[0053]).

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to modify the invention of Song in view of Suzuki. The advantage is reducing the amount of data for processing to increase the efficiency of the compression process.

As per **claim 2**, Song discloses an arrangement as claimed in claim 1, characterized in that the pull-down switch-off signal signals a switching off when the MAD value summed for each frame exceeds a predefined threshold, and/or signals a switching off when the quotient from the first Hadamard coefficient summed frame-by-frame and the second Hadamard coefficient summed frame-by-frame at one or more predefinable positions within a predefinable number of pull-down four-cycles of the converted signal exceeds a predefinable threshold (paragraph [0026]-[0027]; Song discloses comparing the SAD values against a threshold).

As per **claim 3**, Song discloses an arrangement as claimed in claim 2, characterized in that the pull-down switch-off signal signals a switching off of the inverse 3:2 pull-down conversion when at at least one predefinable position within a predefinable number of pull-down four-cycles of the converted signal the value of the quotients of the assigned Hadamard coefficients lies a predefinable value above or below the average of the summed quotients of the Hadamard coefficients of all the positions of this pull-down four-cycle (paragraph [0025]).

As per **claim 4**, Song discloses an arrangement as claimed in claim 3, characterized in that the pull-down switch-off signal signals a switching off of the inverse 3:2 pull-down conversion when at one of the positions one, two or three within three

consecutive cycles of the converted signal the value of the summed quotients of the assigned Hadamard coefficients lies about 10% above or below the average of the quotients of the Hadamard coefficients of all the position of this pull-down four-cycle, wherein the position two within one cycle of the converted signal represents the position whose converted frame was recovered from two different frames of the unconverted signal (paragraphs [0025]-[0027]).

As per **claim 5**, Song discloses an arrangement as claimed in claim 1, characterized in that the pull-down switching signal signals a switching off of the inverse 3:2 pull-down conversion if the MAD signal summed frame-by-frame exceeds three times the average value from the MAD values of a predefinable number of previous frames (paragraph [0026]-[0027]).

As per **claim 6**, Song discloses an arrangement as claimed in claim 1, characterized in that the MAD detector and the circuit for determining the Hadamard coefficients are provided in common for the arrangement and for an MPEG encoder for which the pull-down switch-off signal is provided (paragraph [0025]; these transforms are apart of the MPEG standard).

As per **claim 7**, Song discloses an arrangement as claimed in claim 1, characterized in that the pull-down switch-off signal is provided for an MPEG2 or MPEG4 encoder (paragraph [0025]).

As per **claim 8**, Song discloses use of the arrangement as claimed claim 1 in a DVD recorder (paragraph [0005]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (571) 272 - 7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHRISTOPHER S KELLEY/
Supervisory Patent Examiner, Art Unit 2482

/Chikaodili E Anyikire/
Examiner, Art Unit 2482